

Notice of Allowability

Application No.

10/664,658

Examiner

Li Zheng

Applicant(s)

GELVIN ET AL.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to paper filed 6/19/07.
2. ☒ The allowed claim(s) is/are 1-5, 9-14, 16-17, and 20-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Alice Martin on 6/21/2007.

The claims has been amended as follows:

1. A method for increasing *Agrobacterium* transformation efficiency in a host plant, said method comprising:
 - a. increasing histone levels in the host plant compared to normal levels of histone in the host plant by expressing an exogenous copy of a plant histone gene; and
 - b. transforming the host plant with *Agrobacterium*; [and .]
 - [c. increasing] wherein the transformation efficiency of the host plant expressing the exogenous plant histone gene is increased compared to that of a plant not comprising the exogenous plant histone gene.

9. A method of increasing *Agrobacterium* transformation efficiency in a host plant, the method comprising:

(a) introducing at least one copy of a polynucleotide sequence encoding a plant histone protein to the host plant;

(b) selecting a host plant expressing the polynucleotide sequence encoding a plant histone protein; and

(c) transforming the host plant expressing the polynucleotide sequence encoding a plant histone protein with a DNA molecule of interest using *Agrobacterium*;[and]

[(d) increasing] wherein the transformation efficiency of the host plant expressing the polynucleotide sequence encoding the plant histone protein is increased compared to that of a plant not transformed with the polynucleotide encoding the plant histone protein.

14. The method of claim 10 further comprising adding L-cysteine at a concentration [about] between about 100 mg/L and about 400 mg/L to media used in cultivating the host plant, wherein the host plant is monocot.

16. A method of increasing *Agrobacterium* transformation efficiency in a monocot host plant, the method comprising:

(a) introducing a nucleic acid sequence encoding a plant histone H2A into a host plant;

(b) selecting a host plant material expressing the plant histone H2A protein;

- (c) infecting the host plant material with a DNA molecule of interest by infection with an Agrobacterium strain;
- (d) providing at least one antioxidant in a cocultivation medium, wherein the antioxidant is L-cysteine at a concentration [about] between about 100 mg/L and about 400 mg/L of cocultivation media; and
- (e) selecting the infected material for transformants expressing the DNA molecule of interest; [and]
- [(f) increasing] wherein the transformation efficiency of the monocot host plant expressing the nucleic acid sequence encoding the plant histone H2A protein is increased compared to that of a plant not transformed with the nucleic acid encoding the plant histone H2A protein.

Claims 6-8, 15, 18-19 and 22-25 are cancelled.

Status of Rejections

All the rejections are withdrawn in light of the claims amendments and this amendment.

Allowable Subject Matter

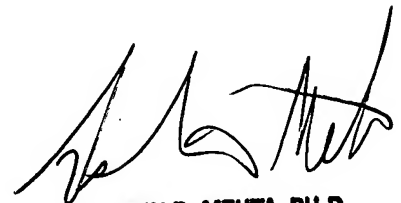
Claims 1-5, 9-14, 16-17, and 20-21 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li Zheng whose telephone number is 571-272-8031. The examiner can normally be reached on Monday through Friday 9:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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PRIMARY EXAMINER